

**AMENDMENTS TO THE CLAIMS:**

**1. (Previously presented)** An isolated protein comprising an amino acid sequence of SEQ ID NO: 2.

**2. (Withdrawn)** A polynucleotide encoding the protein of claim 1.

**3. (Withdrawn)** A polynucleotide according to claim 2, which comprises the DNA sequence of SEQ ID NO: 1.

**4. (Withdrawn)** A polynucleotide selected from the group consisting of the following sequences:

- (c) a DNA sequence of SEQ ID NO: 1,
- (d) a nucleotide sequence that has at least 70% homology to the DNA sequence of SEQ ID NO: 1 and encodes a protein having cyclic depsipeptide synthetase activity,
- (e) a modified DNA sequence of the DNA sequence of SEQ ID NO: 1 that has one or more modifications selected from a substitution, a deletion, an addition and an insertion and encodes a protein having cyclic depsipeptide synthetase activity, and
- (f) a nucleotide sequence that hybridizes with the DNA sequence of SEQ ID NO: 1 under stringent conditions and encodes a protein having cyclic depsipeptide synthetase activity.

**5. (Withdrawn)** The polynucleotide according to claim 4, wherein sequence (d) is a nucleotide sequence that has at least 80% homology to the DNA sequence of SEQ ID NO: 1.

**6. (Withdrawn)** The polynucleotide according to claim 4, wherein sequence (d) is a nucleotide sequence that has at least 90% homology to the DNA sequence of SEQ ID NO: 1.

7. **(Withdrawn)** A recombinant vector comprising the polynucleotide of claim 2 or claim 4.
8. **(Withdrawn)** A host comprising the expression vector of claim 7.
9. **(Withdrawn)** The host according to claim 8, which expresses a cyclic depsipeptide synthetase.
10. **(Withdrawn)** The host according to claim 8, which is a substance PF1022-producing microorganism.
11. **(Withdrawn)** A method for producing a cyclic depsipeptide, which comprises the steps of culturing the host of claim 8 and collecting the cyclic depsipeptide from the culture medium.
12. **(Withdrawn)** The method according to claim 11, wherein the cyclic depsipeptide is the substance PF1022 and a derivative thereof.
13. **(Currently amended)** A method for producing a protein having cyclo(D-lactyl-L-N-methyllleucyl-D-3-phenyllactyl-L-N-methyllleucyl-D-lactyl-L-N-methyllleucyl-D-3-phenyllactyl-L-N-methyllleucyl) (PF1022) synthetase activity, which comprises the steps of:
- culturing a host cell transformed with a vector containing a nucleotide sequence under conditions suitable for protein expression, wherein the nucleotide sequence is selected from the group consisting of:
- (a) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 2;
  - (b) the nucleotide sequence of SEQ ID NO: 1; and

(c) a nucleotide sequence that hybridizes with the nucleotide sequence of SEQ ID NO: 1 under stringent conditions at 0.2 x SSC concentration (1 x SSC: 15 mM trisodium citrate, 150 mM sodium chloride) in a 0.1 % SDS solution at 60°C for 15 minutes and which encodes a protein having PF1022 synthetase activity; and

(d) a nucleotide sequence that at least 95% homology to the nucleotide sequence of SEQ ID NO: 1 and which encodes a protein having PF1022 synthetase activity; and  
collecting the protein from the culture medium.

**14. (Cancelled)**

**15. (Currently amended)** An isolated protein encoded by a nucleotide sequence selected from the group consisting of:

(a) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 2;

(b) the nucleotide sequence of SEQ ID NO: 1; ~~and~~

(c) a nucleotide sequence that hybridizes with the nucleotide sequence of SEQ ID NO: 1 under stringent conditions at 0.2 x SSC concentration (1 x SSC: 15 mM trisodium citrate, 150 mM sodium chloride) in a 0.1 % SDS solution at 60°C for 15 minutes and which encodes a protein having PF1022 synthetase activity[[]]; and

(d) a nucleotide sequence that at least 95% homology to the nucleotide sequence of SEQ ID NO: 1 and which encodes a protein having PF1022 synthetase activity.

**16-17. (Cancelled)**